

CLAIMS

1 1. An ozone generation method characterized in that
2 oxygen gas including moisture of 0.05 - 40 ppm is supplied to
3 an ozonizer of an electric discharge type as source gas for ozone
4 generation.

1 2. An ozone generation method characterized in that
2 moisture is added to oxygen gas when the oxygen gas is supplied
3 to an ozonizer of an electric discharge type as source gas for
4 ozone generation.

1 3. An ozone generation method as claimed in Claim 2,
2 wherein the moisture is added to the oxygen gas so that the moisture
3 volume in the oxygen gas supplied to the ozonizer is within the
4 range of 0.05 - 40 ppm.

1 4. An ozone generation method as claimed in Claims 1 or
2 2, wherein the oxygen gas used has a high purity of at least
3 99.9%.

1 5. An ozone generation method as claimed in Claims 1 or
2 2, wherein ozone gas generated by the ozonizer is used for the
3 manufacturing of a semiconductor.

1 6. An ozone generation method as claimed in Claims 1 or

2 2, wherein ozone gas generated by the ozonizer has a high density
3 of at least 60 g/Nm³.

1 7. An ozone generation apparatus characterized in
2 comprising:

3 an ozonizer of an electric discharge type;

4 a gas supply system, the gas supply system supplying an
5 ozonizer with source gas; and

6 a moisture adjusting device interposed in the gas supply
7 system, the moisture adjusting device adjusting moisture volume
8 in the source gas.

1 8. An ozone generation apparatus as claimed in Claim 7,
2 wherein the moisture adjusting device is a humidifier, the
3 humidifier adding the moisture to the source gas.

1 9. Source gas for ozone generation made of oxygen gas
2 including moisture of 0.05 - 40 ppm.

1 10. A humidifier for adding moisture to oxygen gas
2 supplied to an ozonizer of an electric discharge type as source
3 gas for ozone generation, characterized in comprising:

4 a water tank containing pure water; and

5 a resin tube dipped in the pure water in the water tank,
6 the resin tube distributing the oxygen gas therein.

1 11. A humidifier as claimed in Claim 10, wherein the resin
2 tube has moisture permeability.

1 12. A humidifier as claimed in Claim 10, wherein a heater
2 is provided, the heater controlling a temperature of the pure
3 water in the vessel.

1 13. A humidifier as claimed in Claim 10, wherein an
2 agitator is provided, the agitator agitating the pure water in
3 the vessel.

1 14. A humidifier for adding moisture to oxygen gas
2 supplied to an ozonizer of an electric discharge type as source
3 gas for ozone generation, characterized in comprising:

4 a tube assembly comprised of a plurality of resin tubes
5 bound together; and

6 a vessel containing pure water together with the tube
7 assembly.

1 15. A humidifier as claimed in Claim 14, characterized
2 in that the tube assembly has an entire length longer than an
3 entire length of the vessel and is contained in the vessel in
4 a bending and meandering state.

1 16. A humidifier as claimed in Claim 14, wherein the vessel
2 is configured to distribute the pure water therein.

1 17. A humidifier for adding moisture to oxygen gas
2 supplied to an ozonizer of an electric discharge type as source
3 gas for ozone generation, characterized in comprising,
4 a means for adding pure water to the oxygen gas distributed
5 through a pipe.

1 18. A humidifier for adding moisture to oxygen gas
2 supplied to an ozonizer of an electric discharge type as source
3 gas for ozone generation, characterized in comprising;
4 a vessel for containing pure water;
5 a means for distributing the oxygen gas into the pure water
6 or a space in the vessel.